

0066053



STL

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ANALYTICAL REPORT

PROJECT NO. WMP 200 AREA

F05-011

Lot #: F5C180103

SDG #: W04526

Steve Trent

Fluor Hanford Inc
825 Jadwin
Richland, WA 99352



SEVERN TRENT LABORATORIES, INC.

MARTI WARD
Project Manager

RECEIVED
AUG 22 2005
EDMC

March 29, 2005

Case Narrative
LOT NUMBER: F5C180103
SDG: W04526

This report contains the analytical results for the sample received under chain of custody by STL St. Louis on March 17 2005. This sample is associated with your F05-011 SAF.

The test results in this report meet all NELAP requirements for parameters in which accreditations are held by STL St. Louis. Any exceptions to NELAP requirements are noted in the case narrative. The case narrative is an integral part of this report.

All chemical analysis results are based upon sample as received, wet weight, unless noted otherwise.

Observations/Nonconformances

Reference the chain of custody and condition upon receipt report for any variations on receipt conditions and temperature of samples on receipt.

Nitrate/Nitrite-N

The analytical results included in this report meet all applicable quality control requirements.

SAMPLE SUMMARY

F5C180103

| <u>WO #</u> | <u>SAMPLE#</u> | <u>CLIENT SAMPLE ID</u> | <u>SAMPLED DATE</u> | <u>SAMP TIME</u> |
|-------------|----------------|-------------------------|---------------------|------------------|
| G6G63 | 001 | B1CD87 | 03/14/05 | 05:30 |

NOTE(S) :

- The analytical results of the samples listed above are presented on the following pages.
- All calculations are performed before rounding to avoid round-off errors in calculated results.
- Results noted as "ND" were not detected at or above the stated limit.
- This report must not be reproduced, except in full, without the written approval of the laboratory.
- Results for the following parameters are never reported on a dry weight basis: color, corrosivity, density, flashpoint, ignitability, layers, odor, paint filter test, pH, porosity pressure, reactivity, redox potential, specific gravity, spot tests, solids, solubility, temperature, viscosity, and weight.

METHODS SUMMARY

F5C180103

| <u>PARAMETER</u> | <u>ANALYTICAL METHOD</u> | <u>PREPARATION METHOD</u> |
|------------------|------------------------------|-------------------------------|
| Nitrate-Nitrite | MCAWW 353.1 | |

References:

MCAWW "Methods for Chemical Analysis of Water and Wastes",
EPA-600/4-79-020, March 1983 and subsequent revisions.

| | | | | | | | | |
|---|---|---|----------------------------------|---|--|-----------------|--------|------|
| Fluor Hanford Inc. | | CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST | | | | FORM-011-008 | PAGE 1 | OF 1 |
| COLLECTOR POPE/PFISTER/TYRA/MOKLER | COMPANY CONTACT JACKSON, RL | TELEPHONE NO. 372-3004 | PROJECT COORDINATOR TRENT, SJ | PRICE CODE 7N | DATA TURNAROUND 45 Days / 45 Days | | | |
| SAMPLING LOCATION MO-026 | PROJECT DESIGNATION U Plant Closure Contaminant Plume Refinement - QC | FIELD LOGBOOK NO. 119141E10 | SAF NO. R05-011 | AIR QUALITY <input type="checkbox"/> | | | | |
| ICE CHEST NO. AUS-500 | COA 119141E10 | METHOD OF SHIPMENT GOVERNMENT-VERBEE | | Fed Ex @ MARS 3/14/05 | | | | |
| SHIPPED TO Severn Trent St. Louis | OFFSITE PROPERTY NO. WA 0 Su PTR 1507A | BILL OF LADING/AIR BILL NO. MAD 2U PTR 1507A | | | | | | |
| MATRIX A-Air DL-Drum L-Liquid DS-Drum S-Solids L-Liquid O-Oil S-Soil SF-Sediment T-Tissue V-Vegetation W-Water W-Wipe X-Other | POSSIBLE SAMPLE HAZARDS/REMARKS Samples did not originate in radiological controlled area. No total activity associated with sample/samples. | PRESERVATION K2SO4 to pH <2 Cool 4C | TYPE OF CONTAINER | NO. OF CONTAINERS(S) | VOLUME | SAMPLE ANALYSIS | | |
| SPECIAL HANDLING AND/OR STORAGE W04526 | | | | | | | | |
| SAMPLE NO. BICD87 | MATRIX WATER | SAMPLE DATE 3-14-05 | SAMPLE TIME 0530 | X | 369 | | | |
| CHAIN OF POSSESSION | | SIGN/PRINT NAMES | | SPECIAL INSTRUCTIONS | | | | |
| RELINQUISHED BY/REMOVED FROM S. Naife | DATE/TIME 3/14/05 | RECEIVED BY/STORED IN MO-026 (RSEF) | DATE/TIME 3/14/05 | | | | | |
| RELINQUISHED BY/REMOVED FROM MO-026 | DATE/TIME 3/14/05 | RECEIVED BY/STORED IN MAD 2U PTR 1507A | DATE/TIME 3/14/05 | | | | | |
| RELINQUISHED BY/REMOVED FROM MAD 2U PTR 1507A | DATE/TIME 3/14/05 | RECEIVED BY/STORED IN Fed Ex | DATE/TIME 3/14/05 | | | | | |
| RELINQUISHED BY/REMOVED FROM b-lc | DATE/TIME 3/14/05 | RECEIVED BY/STORED IN b-lc | DATE/TIME 3/14/05 | | | | | |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME | | | | | |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME | | | | | |
| RELINQUISHED BY/REMOVED FROM | DATE/TIME | RECEIVED BY/STORED IN | DATE/TIME | | | | | |
| LABORATORY SECTION 6-8-8 | RECEIVED BY | TITLE | | DATE/TIME 3/14/05 0900 | | | | |
| FINAL SAMPLE DISPOSITION | DISPOSAL METHOD | DISPOSED BY | | DATE/TIME | | | | |

LOT # F5C180103

MO 4526



STL

Lot No: F5C180103
F56170297 *MW*
3.18.05

Condition Upon Receipt Form
St. Louis Laboratory

Client: Floor Hanford
Quote No: 63421
Shipper/No: FBI 990949919223

Date: 3/13/05 Time: 0900
Initiated by: bl
COC/RFA Numbers: FOS-011
FOS-009

Condition/Variance (Circle "Y" for yes; "N" for no and "N/A" for not applicable):

| | | | |
|---|--|--|--|
| 1. <input checked="" type="radio"/> Y <input type="radio"/> N | Sample received in undamaged condition? | 7. <input checked="" type="radio"/> Y <input type="radio"/> N | Sample received with Chain of Custody? |
| 2. <input checked="" type="radio"/> Y <input type="radio"/> N | Sample received within $4-C \pm 2-C^*$? | 8. <input checked="" type="radio"/> Y <input type="radio"/> N | Chain of Custody matches sample IDs on containers? |
| | Record <u>2°</u> | 9. <input type="radio"/> Y <input checked="" type="radio"/> N <input type="radio"/> N/A | Custody seal received intact on cooler.? |
| 3. <input checked="" type="radio"/> Y <input type="radio"/> N <input type="radio"/> N/A | Sample received with proper pH '1'? | 10. <input type="radio"/> Y <input checked="" type="radio"/> N <input type="radio"/> N/A | Custody seal tamper evident on cooler.? |
| 4. <input type="radio"/> Y <input type="radio"/> N | If N/A - Was pH taken by original STL lab? | 11. <input type="radio"/> Y <input checked="" type="radio"/> N <input type="radio"/> N/A | Custody seal on bottles received intact? |
| 5. <input checked="" type="radio"/> Y <input type="radio"/> N | Sample received in proper containers? | 12. <input type="radio"/> Y <input checked="" type="radio"/> N <input type="radio"/> N/A | Custody seal tamper evident on bottles? |
| 6. <input checked="" type="radio"/> Y <input type="radio"/> N | Sample volume sufficient for analysis? | 13. <input type="radio"/> Y <input type="radio"/> N | Was CUR (equivalent) rec' d from original STL lab? |

* Temperature Variance Does Not Affect the Following Analyses:

For DOE-AL (Pantex, LANL, Sandia) sites, verify pH all containers received, except for VOA, TOX, and soils.

Notes: FCS-011-008
FOS-009-176, 175, 178, 179, 180, 177, 092, 096
171, 095, 089, 094, 090, 093, 174
102, 172, 173, 175

Corrective Action:

- Client's Name: _____ Informed by: _____ By: _____
- Sample(s) processed "as is". _____
- Sample(s) on hold until: _____ If released, notify: _____

Project Management Review: MWard Date: 3.17.05

THIS FORM MUST BE COMPLETED AT THE TIME THE ITEMS ARE BEING CHECKED
IF ANY ITEM IS COMPLETED BY SOMEONE OTHER THAN THE INITIATOR, THEN THAT PERSON IS REQUIRED TO APPLY THEIR
INITIALS AND THE DATE NEXT TO THAT ITEM

5630

ADMIN-0004, Revised 2/17/04

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STL ST. LOUIS

FLUOR HANFORD IC

Client Sample ID: B1CD87

General Chemistry

Lot-Sample #...: F5C180103-001 Work Order #...: G6G63 Matrix.....: WATER
Date Sampled...: 03/14/05 05:30 Date Received...: 03/17/05

| <u>PARAMETER</u> | <u>RESULT</u> | <u>RL</u> | <u>UNITS</u> | <u>METHOD</u> | <u>PREPARATION- ANALYSIS DATE</u> | <u>PREP BATCH #</u> |
|------------------|---------------|--------------------|--------------|-------------------------|---------------------------------------|-------------------------|
| Nitrate as N | ND | 50.0 | ug/L | MCAW 353.1 | 03/23/05 | 5083047 |
| | | Dilution Factor: 1 | | Analysis Time...: 00:00 | MDL.....: 2.7 | |

MATRIX SPIKE SAMPLE DATA REPORT

General Chemistry

Client Lot #....: F5C180103

Matrix.....: WATER

Date Sampled....: 03/14/05 05:30 Date Received...: 03/17/05

| <u>PARAMETER</u> | <u>SAMPLE</u> | <u>SPIKE</u> | <u>MEASURED</u> | <u>PERCENT</u> | <u>PREPARATION-</u> | <u>PREP</u> | |
|------------------|---------------|--------------|----------------------------|-----------------|--------------------------------|----------------------|----------------|
| | <u>AMOUNT</u> | <u>AMT</u> | <u>AMOUNT</u> | <u>RECOVERY</u> | <u>METHOD</u> | <u>ANALYSIS DATE</u> | <u>BATCH #</u> |
| Nitrate as N | | | Work Order #....: G6G631AC | | MS Lot-Sample #: F5C180103-001 | | |
| | ND | 500 | 478 ug/L | 96 | MCAWW 353.1 | 03/23/05 | 5083047 |
| | | | Dilution Factor: 1 | | Analysis Time..: 00:00 | | |

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

STL ST. LOUIS

METHOD BLANK REPORT

General Chemistry

Client Lot #...: F5C180103

Matrix.....: WATER

| <u>PARAMETER</u> | <u>RESULT</u> | <u>REPORTING</u> | | <u>METHOD</u> | <u>PREPARATION-</u> | <u>PREP</u> |
|------------------|---------------|------------------------|--------------|--------------------------------|----------------------|----------------|
| | | <u>LIMIT</u> | <u>UNITS</u> | | <u>ANALYSIS DATE</u> | <u>BATCH #</u> |
| Nitrate as N | ND | Work Order #: G60H51AA | | MB Lot-Sample #: F5C240000-047 | 03/23/05 | 5083047 |
| | | 50.0 | ug/L | MCAWW 353.1 | | |
| | | Dilution Factor: 1 | | | | |
| | | Analysis Time... 00:00 | | | | |

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

STL ST. LOUIS

LABORATORY CONTROL SAMPLE DATA REPORT

General Chemistry

Lot-Sample #...: F5C180103

Matrix.....: WATER

| <u>PARAMETER</u> | <u>SPIKE</u> <u>AMOUNT</u> | <u>MEASURED</u> <u>AMOUNT</u> | <u>UNITS</u> | <u>PERCENT</u> <u>RECVRY</u> | <u>RPD</u> | <u>METHOD</u> | <u>PREPARATION-</u> <u>ANALYSIS DATE</u> | <u>PREP</u> <u>BATCH #</u> |
|------------------|-------------------------------|----------------------------------|--------------|---------------------------------|------------|---------------|---|-------------------------------|
| Nitrate as N | | | | | | | | |
| | 400 | 368 | ug/L | 92 | | MCAW 353.1 | 03/23/05 | 5083047 |
| | 400 | 387 | ug/L | 97 | 5.0 | MCAW 353.1 | 03/23/05 | 5083047 |

Dilution Factor: 1

Analysis Time... 00:00

NOTE (S) :

Calculations are performed before rounding to avoid round-off errors in calculated results.